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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 10/542,163 | 07/12/2005 | Akira Kida | 59395US006 | 8457 |
| 32692 7590 03/09/2007 3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427 | | | EXAMINER TYNAN, MATTHEW | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2871 | |

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|--|-------------------|---------------|
| SHORTENED STATUTORY PERIOD OF RESPONSE | NOTIFICATION DATE | DELIVERY MODE |
| 3 MONTHS | 03/09/2007 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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| Office Action Summary | Application No. 10/542,163 | Applicant(s) KIDA, AKIRA | |
| | Examiner Matthew Tynan | Art Unit 2871 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>8/22/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 8/22/2005 was filed after the mailing date of the instant application on 7/12/2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

3. Claims 5-10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend upon another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Marsh (U.S. Patent No. 2,444,520).

6. Regarding claim 1, Marsh discloses:

- At least one optical film (20, Fig. 1).

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- A least four optical film fixing parts (slots) disposed at an outer peripheral portion of said optical film.
- A film tension controlling member (16) attached at one of the ends thereof to each of said film fixing parts.
- A film fixing frame (10) connected to the other end of said film tension controlling member.
- The optical film, film tension controlling member, and film fixing frame are integrated with one another and are constituted into one component.

7. Thus, Marsh meets all of the claim limitations in the body of claim 1. Regarding the preamble, Marsh does not teach the optical film structure disposed on a light transmission surface of an illumination unit. However, the structure taught by Marsh could be applied to such a use.

8. Regarding claim 2, Marsh teaches the optical film is a polarization film (col. 2, lines 44-46).

9. Regarding claim 3, Marsh teaches the film tension controlling member is formed of an elastic material (col. 2, lines 29-30).

10. Regarding claim 4, Marsh teaches the elastic material is a spring (col. 2, lines 29-30).

11. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Bodde (U.S. Patent No. 2,242,567).

12. Regarding claim 1, Bodde discloses optical film structure disposed on a light transmission surface of an illumination unit:

- At least one optical film (18, Fig. 3).

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- A least four optical film fixing parts (slots) disposed at an outer peripheral portion of said optical film.
- A film tension controlling member (17) attached at one of the ends thereof to each of said film fixing parts.
- A film fixing frame (16) connected to the other end of said film tension controlling member.
- The optical film, film tension controlling member, and film fixing frame are integrated with one another and are constituted into one component.

13. Regarding claim 2, Bodde teaches the optical film is a light diffusion film (col. 4, lines 19-22).

14. Regarding claim 3, Bodde teaches the film tension controlling member is formed of an elastic material (col. 2, 52).

15. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by James (U.S. Patent No. 2,905,757).

16. Regarding claim 1, James teaches an optical film structure disposed on a light transmission surface of an illumination unit (1, Fig. 1) for modulating light emitted from said illumination unit and projecting modulated light, comprising:

- At least one optical film (24, Fig. 2).
- A least four optical film fixing parts (26) disposed at an outer peripheral portion of said optical film.
- A film tension controlling member (27, 28) attached at one of the ends thereof to each of said film fixing parts.

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- A film fixing frame (25) connected to the other end of said film tension controlling member.
- The optical film, film tension controlling member, and film fixing frame are integrated with one another and are constituted into one component.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Insofar as the applicant may argue that the limitations of the preamble of claim 1 are not met by Marsh, claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroiwa et al. (U.S. Patent No. 6,317,180) in view of Marsh (U.S. Patent No. 2,444,520).

19. Regarding claim 1, Kuroiwa et al. discloses an optical film (160, Fig. 1) disposed on a light transmission surface of an illuminating unit (170) for modulating light emitted from said illumination unit and projecting modulated light.

20. Kuroiwa does not teach:

- A least four optical film fixing parts disposed at an outer peripheral portion of said optical film.
- A film tension controlling member attached at one of the ends thereof to each of said film fixing parts.
- A film fixing frame connected to the other end of said film tension controlling member.

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- The optical film, film tension controlling member, and film fixing frame are integrated with one another and are constituted into one component.

21. However, Marsh discloses:

- At least one optical film (20, Fig. 1).
- A least four optical film fixing parts (slots) disposed at an outer peripheral portion of said optical film.
- A film tension controlling member (16) attached at one of the ends thereof to each of said film fixing parts.
- A film fixing frame (10) connected to the other end of said film tension controlling member.
- The optical film, film tension controlling member, and film fixing frame are integrated with one another and are constituted into one component.

22. Marsh further teaches that such a structure results maintains a substantially flat sheet over large range of temperatures and moisture contents with freedom from any harm to its polarizing properties (col. 3, lines 60-64).

23. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device taught by Kuroiwa et al. using the optical film frame taught by Marsh in order to maintain a substantially flat sheet over large range of temperatures and moisture contents with freedom from any harm to its polarizing properties.

24. Regarding claim 2, Marsh teaches the optical film is a polarization film (col. 2, lines 44-46).

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25. Regarding claim 3, Marsh teaches the film tension controlling member is formed of an elastic material (col. 2, lines 29-30).

26. Regarding claim 4, Marsh teaches the elastic material is a spring (col. 2, lines 29-30).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Tynan whose telephone number is 571-270-1433. The examiner can normally be reached on Mon-Fri. 7:30-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-4491. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew Tynan 3/2/07

Andrew Schechter
ANDREW SCHECHTER
PRIMARY EXAMINER